# RESEARCH



# Exploring bilingual EFL teacher resilience in the Iranian non-profit and state schools: a mixed-methods study



Khadijeh Rezazadeh, Mostafa Janebi Enayat<sup>\*</sup> and Fatemeh Poorebrahim

\*Correspondence: m.enayat@maragheh.ac.ir

English Department, Faculty of Human Sciences, University of Maragheh, Daneshgah Boulevard, Madar Square, Maragheh, Iran

# Abstract

The present mixed-methods study investigated the factors that build Iranian bilingual Azeri-Persian English as a foreign language teacher resilience (TR) in non-profit and state schools. To do so, 205 male and female teachers selected through snowball sampling from several schools in different regions of Iran participated in this study. In the quantitative phase, the Connor and Davidson resilience scale (CD-RISC) was utilized to measure TR. First, the factor structure of the scale was ensured through testing confirmatory factor analysis (CFA). Results indicated that all the five factors of TR tested by the CD-RISC were evident among all the respondents, and there were no significant differences between the factors building TR in state and non-profit schools. For the gualitative phase, 26 male and female teachers selected through purposive sampling participated in semi-structured interviews which were thematically analyzed through MAXQDA software. The findings revealed that while state school teachers perceived satisfactory curriculum and policies and consulting with colleagues as the building factors for TR, non-profit school teachers highlighted teacher training courses, teacherstudent rapport, and students' progress as the important factors. The pedagogical implications of this study for teacher education are explained.

**Keywords:** Teacher education, Teacher Resilience, Bilingual setting, Non-profit institutes, State schools, Mixed-methods research

# Introduction

Research on teacher resilience (TR) has thrived over the last years, and various studies have associated resilience with positive results for teachers, such as foreign language teaching enjoyment (Derakhshan et al., 2022), work fulfillment (Papatraianou & Le Coenu, 2014), dedication (Day & Hong, 2016), efficacy (Hong, 2012), commitment (Day & Gu, 2014; Day & Hong, 2016), inspiration (Day & Gu, 2014; Day & Hong, 2016; Hong, 2012; Mansfield et al., 2016; Papatraianou & Le Coenu, 2014), well-being (Mansfield et al., 2016), and positive sense of personality (Day & Hong, 2016; Papatraianou & Le Coenu, 2014). Resilience is a particular strategy which people resort to when they face a kind of detrimental situation (Castro et al., 2010). MacIntyre et al. (2019) believed that



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teaching second/foreign languages is an intrinsically stressful career with the amounts of stress enhancing for educators throughout the world.

During the past two decades, researchers have been attracted to study the influence of resilience as one of the constructive characteristics of teachers. Therefore, TR research in underprivileged schools is crucial, as teachers with higher understanding of resilience may be less vulnerable to job stress and burnout (Richards et al., 2016). Moreover, the performance of teachers has been anticipated by characteristics related to resilience, such as determination, energy, and life fulfillment (Fleming et al., 2013). In addition, resilience offers profound knowledge permitting specialists and analysts to examine the teacher's personal and contextual dimensions to investigate the individual and group components which impact the instructor's ability to support their interest and sensation of responsibility, and it provides a situation which develops the adaptability of the teacher (Gu & Li, 2013).

Studies that aim to explore the strategies and motivations behind constructing resilience on the part of the teachers are concerned with the teachers' psychological wellbeing and teaching effectiveness. For instance, Mansfield et al. (2018) pointed out that the pre-service teachers may develop a capacity for resilience by relying on factors, such as problem solving, motivation, time management, commitment, and adopting coping strategies. However, the positive role of resilience has been explored in few empirical studies attempting to probe the relationship between TR and personal (e.g., motivation and self-efficacy) or contextual resources (e.g., support from the outside). The investigations are mostly qualitative with small sample sizes and with the goal of understanding teachers' experiences at different levels of their teaching (Razmjoo & Ayoobiyan, 2019). Additionally, Rostami and Yousefi (2020) rightly emphasizes the inappropriate conditions of English teachers in non-profit institutes in the Iranian context and pointed out that they need to interact more with their colleagues and principles, pose the problems and their critical incidents to enact a better agency, which would bring them higher professionalism and well-being. Considering debates that the prosperity of kids and youngsters is inseparable from the prosperity of their teachers (Day & Gu, 2009), this study investigated the extent that state schools and non-profit institutes could encourage positive learning conditions. Teacher education programs neglect the social and emotional aspects of teaching and, instead, focus on improving the teachers' pedagogical abilities and the students' test scores. Consequently, even professional teachers who are expert in their field are unable to manage the emotional demands of their job effectively, leading to attrition and burnout (Wang, 2021). Therefore, this study signifies the need for investigating TR as a psychological characteristic which urges the teachers to remain in their career despite its hardships. It is worth mentioning that there is a bulk of research concerning the building factors of TR in general teacher education (e.g., Gu & Day, 2013; Mansfield et al., 2016), while there is a paucity of research on TR in the area of teaching a foreign or second language (Liu & Chu, 2022). Another gap concerns the functions of cultural elements and multiculturalism which might be ubiquitous in almost all facets of L2 education (Kuo & Lai, 2006; Wang et al., 2022) in structuring and restructuring TR. Furthermore, despite the fact that bilingual teachers work mainly in hardto-staff settings (Jimenez-Silva et al., 2021; Ocasio, 2014), few investigations have been done on bilingual TR (e.g., Kandel-Cisco & Padrón, 2008). Moreover, since resilience is

a contextual phenomenon (Johnson et al., 2014; Li & Yang, 2016), this research examined the resilience of bilingual teachers in two different settings, namely state schools and non-profit institutes in order to discover the determining factors building TR in these two contexts. Besides, Agar (1994) used the term *laguaculture* and claimed that language and culture are intertwined. Ayala (2020) also stated that language and culture are closely related. This stimulates to delve into the differences among Azari and Persian English as a Foreign Language (EFL) teachers through a cross-cultural lens, as both languages have comparable cultural beliefs, attitudes, values, perspectives, and directions. Therefore, the current mixed-methods study contributes to the literature by exploring the characteristics of bilingual EFL TR and investigating different types of strategies teachers at state schools and non-profit institutes apply to achieve resilience in the Iranian context.

# Literature review

#### **Theoretical framework**

The term resilience was used by Holling (1973) to portray the capacity of ecosystems to recoup after a distress. Since then, this concept has been applied in different contexts, especially in sociologies, to depict the adaptive abilities of people, societies, and communities (e.g., Bonanno, 2004; Magis, 2010; White et al., 2008). Besides, based on the findings of Ungar (2008), four frameworks which reinforce a more culturally and contextually based conception of resilience are supported: (1) there are global, cultural and context-specific aspects of lives of young people which contribute to their resilience; (2) resilience factors have varying levels of impact on the development of a child based on the specific culture and context in which resilience is recognized; (3) aspects of lives for children that lead to resilience are interrelated in behaviors that represent the culture and contexts are handled in ways that represent very particular relationships with the facets of resilience.

TR is a fairly new area of research. While the stresses that confront educators in their everyday lives have been well recorded (e.g., Goddard & Foster, 2001; Tait, 2008), researchers have recently concentrated on TR (e.g., Liu & Chu, 2022; Tamah & Wirjawan, 2021; Wang et al., 2022). For teachers, resilience includes the ability to work well over the long haul in typical educational conditions (Luthar & Brown, 2007). Individual, interpersonal, contextual, educational, and emotional factors have been found to play a role in TR (see e.g., Ainsworth & Oldfield, 2019; Bennett et al., 2013; Gu & Day, 2013; Mansfield et al., 2016; Shields & Mullen, 2020; Taylor, 2013). Mansfield et al. (2012a) proposed four key dimensions of TR: professional, emotional, social and motivational. The profession-related dimension includes aspects relevant to the process of teaching, some of which might be discussed generally in teacher training programs. The emotional dimension covers reactions to the teaching activities, emotional administration and adapting to tension. Resilient teachers are identified as individuals who love the profession and are ready to bounce back after experiencing difficulties. They are emotionally strong, remain relaxed in tough situations, and cope with the teaching demands. The social dimension includes aspects relevant to social connections in the workplace, such as establishing network, requesting assistance and asking for recommendation. Resilient teachers are willing to share their stresses and have strong and honest interactions with their colleagues. Self-belief, concentrating on constant development and learning, commitment, and determination are covered in the motivational aspect. Resilient teachers are perceived as motivated teachers capable of preserving a high degree of commitment and excitement for the job considering its hardships and tolerate difficulties within their teaching career.

#### **Review of empirical studies**

A number of studies have investigated the underlying features of resilient teachers. Daniilidou and Plastidou (2018), for instance, conducted a quantitative research on 136 Greek secondary training educators to generate a reliable scale to evaluate both the interior and exterior protective factors that influence the teachers' levels of resilience. The outcomes of the exploratory factor analysis demonstrated that the new TR Scale (TRS) enjoys the benefit of evaluating both the inside and outside protective factors of resilience. According to another quantitative study targeting 59 Portuguese in-service teachers to assess the impacts of education program focused on resilience and well-being, Fernandes et al. (2019) mentioned that resilience among teachers could be promoted to assist their well-being and dedication to quality education.

In a comparative study, by quantifying a range of concepts recognized as significant in the field of TR literature, Ainsworth and Oldfield (2019) attempted to identify several important predictors of burnout, job satisfaction, and well-being which are related to TR. The findings proposed that contextual impacts on teachers' capacity to succeed in the career are as significant as individual features. Moreover, Fathi and Saeeidian (2020) carried out a research to examine the importance of teachers' sense of efficacy and their resilience in estimating teacher burnout. The outcomes showed that teachers' sense of efficacy depicted 20.1% of the burnout variance while TR explained 11.7% of the variance in teacher burnout.

In another study, Morettini et al. (2020) conducted a study to investigate the relationship between mentoring and contextual acceptance and their effects on teacher's resilience. The results revealed that the expectations of contextual recognition in the school and broader society by novice teachers helped them develop their resilience. Furthermore, Kangas-Dick and O'Shaughnessy (2020) addressed TR and the vital role it plays in avoiding school turnover and burnout. Their findings suggested that while individual variables lead to resilience, contextual variables tend to be more effective for the creation of healthy and collaborative conditions where teachers and their students can succeed.

Ergün and Dewaele (2021) evaluated the association between two psychological characteristics, well-being and resilience as well as a new emotional aspect, namely foreign language teaching enjoyment (FLTE). Resilience was the largest predictor of FLTE, followed by well-being, according to correlations and multiple regression analyses. The findings demonstrated that cheerful, resilient teachers who like their jobs are the basis for the students' success because the pleasant emotional climate they create in the classroom is a prerequisite for linguistic and psychological development. In a similar study, Hascher et al. (2021) investigated how TR and teacher well-being have been conceived and presented an integrative model that intended to illuminate the relation between the two. Results elucidated that both TR and teacher well-being could be defined as "slippery" constructs, as they are related in a couple of ways within the literature, used in distinct ways in empirical work, and evaluated in various settings and contexts.

Gratacós et al. (2021) probed the extent that TR could enhance self-perceived efficacy involving beginning teachers. They found a positive connection between the two factors and a statistically significant association between self-efficacy and the social and motivational components of TR. Consequently, TR could be a critical element to improve their adaptive abilities to confront demanding circumstances, giving rise to self-efficacy. Derakhshan et al. (2022) further explored the contribution of TR, well-being, and L2 grit to FLTE among Iranian EFL teachers. Using four scales for data collection and structural equation modeling for data analysis, the researchers found that the independent variables significantly predicted FLTE. In particular, the resilient teachers were more likely to enjoy the foreign language teaching experience.

As for the association between context and TR and, in an attempt to validate a scale for probing EFL TR, Liu and Chu (2022) conducted a quantitative investigation to explore the structure of resilience among Chinese EFL teachers. Using an adapted version of Connor–Davidson resilience scale (CD-RISC) and performing exploratory and confirmatory factor analyses, the researchers found a tri-factorial construct of EFL TR, involving tenacity, optimism, and coping style. The study, therefore, proposed a shorter validated version of CD-RISC which included only 10 items from the 25-item scale. Moreover, Wang et al. (2022) explored the challenges of maintaining resilience among Iranian and Chines EFL teachers. The results reported that Iranian and Chinese EFL teachers perceive personal factors as the main challenges in maintaining TR. Other features, such as system-focused, context-focused, and process-focused features were considered less controversial for TR.

# The current study

The concept of TR has been quite absent from the literature on resilience until fairly recently with studies primarily centered upon researches on childhood resilience and the individuals who have prevailed high and significant difficulty (Beltman et al., 2011). Language learning in Iranian EFL context is predominantly fulfilled in formal institutional classroom contexts at non-profit language institutes or state schools. These educational contexts may have differences in their educational facilities, the degree of job satisfaction among their staff, the quality of education, management, type of learners, workmanship, salary raising polices, teacher training programs, promotion programs, workload, teaching materials, type of employment contract, and incentives (Daniels, 2016; Fives & Alexander, 2004; Iliya & Ifeoma, 2015; Yaghoubinejad et al., 2017). Considering the differences between state school and non-profit institute contexts and due to the paucity of studies on non-profit institutes' TR (Entesari et al., 2020), the current study adds to the literature by examining the teachers' promoting resilience at non-profit institutes in the Iranian setting to find how the setting could affect the factors that build resilience. Besides, studies of multilingualism and personality confirmed that a majority of bilingual and multilingual speakers feel different when they switch to different languages (Dewaele & Nakano, 2013; Pavlenko, 2006; Wilson, 2008). Regarding the importance of bilingualism and paucity of investigations on bilingual TR, this research contributes to the literature by examining the characteristics of bilingual EFL TR in the Iranian setting.

Accordingly, this study aimed at exploring the cultural characteristics of bilingual resilient teachers in state schools and non-profit institutes. This study focuses on bilingual English TR because bilingual English teachers may provide distinct psychological factors as they use two different languages in different contexts. By now, resilience has been identified as a major factor in effective performance of English teachers in the Iranian context (e.g., Razmjoo & Ayoobiyan, 2019). Yet, little is known about how this characteristic works out to support bilingual teachers' performance at workplaces. This mixedmethods study, therefore, tried to answer the following research questions:

- 1. What are the significant factors that develop bilingual EFL TR in state schools?
- 2. What are the significant factors that develop bilingual EFL TR in non-profit institutes?
- 3. Are there any differences between the factors that develop bilingual EFL TR in state schools and non-profit institutes?

# Methods

#### Design

The design of the current study was explanatory sequential mixed-methods. In order to provide a precise and comprehensive picture of the resilience of Iranian bilingual EFL teachers, the researchers gathered both quantitative and qualitative data. Explanatory sequential mixed-methods involve conducting quantitative research first, analyzing the findings, and then building on the findings to explain them in more depth using qualitative research (Creswell, 2003; Riazi & Candlin, 2014). Since the qualitative data further illuminates the initial quantitative data results, it is regarded as explanatory (Creswell & Plano Clark, 2011). It is also regarded sequential given the fact that the initial quantitative phase of the study is followed by the qualitative phase (Creswell, 2003). Triangulation appears to be the primary justification for using the mixed-methods strategy in research. Triangulation is the process of "examining the same dimension of a research problem" (Jick, 1979, p. 602) through using multiple methods to answer the same research question. The primary reason for using a mixed-methods approach was to triangulate the data.

## Participants

Regarding the flexibility of the snowball sampling (Parker et al., 2019), the researchers applied snowball sampling method for the quantitative phase of this study. This sampling is a recruitment technique in which the available participants of the study are asked to assist the researcher to find more potential subjects. The context of the present study was in Iran which is a multilingual and multicultural country and has a relatively great number of native speakers of the four major languages, including Persian, Azeri, Kurdish, and Arabic (Rezaei et al., 2017). Azeri or Azerbaijani also known as Azeri Turkish is a variety of Turkish (Brown, 2005). The participants of the study were male and female EFL teachers holding BA, MA, and PhD degrees from different cities of East and West Azerbaijan Provinces in Iran, such as Tabriz, Maragheh, Urmia, and Khoy ranging in age from 22 to 50 (see Table 1 for more demographic information). The first language of all

Context	N	Age				Academic degree		Teaching experience				
		22–30	31–40	41–50	Male	Female	BA	MA	PhD	1–10	11–20	21–30
State schools	105	24	51	30	43	62	47	52	6	47	35	23
Non-profit institutes	100	60	31	7	22	78	44	33	3	81	17	2

**Table 1** The demographic information of the participants

the participants was Azeri and their second language was Persian, and their perceived English language proficiency ranged from intermediate (N=152) to advanced (N=53). The researchers determined the proficiency level of the participants based on their previous IELTS scores. Therefore, they were divided into B<sub>1</sub> and C<sub>1</sub> based on the Common European Framework of Reference (CEFR) framework. As for the qualitative stage of the study, a semi-structured interview was conducted with a purposive sub-group of the larger sample (N=26), including 13 participants from state school teachers and 13 from non-profit institute teachers. Taking into account the suggested number of observations per estimated parameters (see Bentler & Chou, 1987; Kline, 2016), the sample of this study which consisted of 205 observations was large enough.

### Instruments

# Connor–Davidson resilience scale (CD-RISC)

This multi-faceted resilience questionnaire was developed by Connor and Davidson (2003) in order to assess resilience scale. The CD-RISC is composed of 25 items. Items 10, 11, 12, 16, 17, 23, 24, 25 test personal competence, high standards, and tenacity (factor 1). Teachers with stronger psychological resilience incorporate traits, including stress tolerance, tenacity, and goal orientation when faced with difficulty and dissatisfaction as shown by this factor (Wu et al., 2017). Resilient teachers may deal with challenges and tensions when performing in the workplace. Items 6, 7, 14, 15, 18, 19, 20 test trust in one's instincts, tolerance of negative effect, and strengthening effects of stress (factor 2). This signifies that teachers may use instinct to help them overcome difficulties. In addition, this characteristic of resilient individuals demonstrates their capacity for adaptation and acceptance of environmental change (Wu et al., 2017). It is crucial because it embodies the essential concepts of resilience and positive psychology in addition to the meaning of striving against adversity (Friedman & Baum, 2016). Items 1, 2, 4, 5, 8 test positive acceptance of change and secure relationships (factor 3). This variable expresses optimism and sense of security. It displays the capacity to confidently conquer challenges as a crucial component of resilience (Wu et al., 2017). Items 13, 21, 22 test control (factor 4). This factor indicates that teachers always have control over how they respond to their situations. Items 3, 9 test spiritual influence (factor 5). This characteristic demonstrates a sense of meaning and purpose. Spirituality is the most powerful means of influencing healing; only God has the authority to determine life and death, and is ultimately in charge of one's physical and spiritual well-being (Johnson et al., 2005). See Table 2 for samples of items from each factor. These factors are assessed on a five-point Likert scale ranging from 1 (not true at all) to 5 (true nearly

Table 2 Sample items from the CD-RISC for each factor

Factor	Sample item
1	l am not easily discouraged by failure
2	Having to cope with stress can make me stronger
3	I have at least one close relationship which could help me in stressful situations
4	I have a strong sense of purpose in my life
5	Fate or god can help me sometimes when there is no clear solution for my problems

all of the time). The internal consistency of this scale measured through Cronbach's alpha has reached 0.89 (Connor & Davidson, 2003). The CD-RISC questionnaire has been used in many studies (e.g., Daniilidou & Plastidou, 2018; Entesari et al., 2020) and has proved to be effective in obtaining data with regard to resilience. The original version of this questionnaire was translated to Persian by Mohammadi (2003) which is widely employed by Iranian researchers. Therefore, the Persian version was used in this study so that the participants could have a clear understanding of the items. In order to check the face validity and content validity of the Persian version of the questionnaire, a panel of experts who were university instructors, were asked to evaluate the measure. The panel provided positive feedback with respect to the validity of the scale and then it was recruited. The construct validity of the Persian version, checked through confirmatory factor analysis (CFA), was approved after making modifications and deleting items 2 and 20 from the scale  $[X^2/df = 1.68,$ p = 0.01, CFI = 0.91, TLI = 0.90, RMSEA = 0.05]. Therefore, the components of trust in one's instinct and secure relationships were removed from factors 2 and 3, respectively. The Cronbach's alpha coefficient estimation revealed that the 23-item scale had high reliability (a = 0.91).

#### Semi-structured interviews

To achieve a more accurate and comprehensive picture of factors that build Iranian bilingual EFL TR, individual semi-structured interviews were also conducted. The semi-structured interview comprised of six open-ended questions which revolved around key aspects of TR mentioned in the related literature (see "Appendix 1"). The preparation of the semi-structured interview questions was assisted by a two-stage method of question review and assessment to ensure that the interview schedule had a strong emphasis on the subject of TR. Previous related studies were reviewed to write a first draft for the open-ended questions of semi-structured interview (see "Appendix 2"). In the second stage, the second draft of semi-structured interview questions was sent to two of the experts in the field to be reviewed. A number of modifications were made to the semi-structured interview schedule in light of the recommendations from this process. The use of a team of experts is a common way for researchers to improve the validity of their data in terms of its content (Polit & Beck, 2006), and it is a suggested technique to guarantee that questions are not constrained by the thought or experience of the researchers on the subject (Davis, 1992).

#### Procedure

#### The pilot phase

To ensure the clarity of the items and reliability of the scale, a group of 30 Iranian bilingual EFL teachers from state and non-profit sectors who was similar to the participants in the main study were chosen to trial the questionnaire. The Persian version of the questionnaire was piloted by these participants. The participants reported no problems knowing or responding the questions. Furthermore, the amount of the time needed to complete the survey was estimated by the researchers.

#### The main phase

The electronic version of the questionnaire was first distributed online among the participants of the study due to the outbreak of COVID-19 pandemic. The researchers created a group on Telegram with the initial participants, and they explained the scale fully. Therefore, the researchers began with a limited number of initial participants, who were invited to participate in the research because they had met the requirements. The willing participants were then requested to suggest further contacts who could meet the research requirements and may want to participate based on their own consent, who, in turn, suggested additional possible volunteers to fill out the scale by forwarding the link via social networking apps, such as WhatsApp and Telegram for obtaining a larger sample. The participants were expected to complete the questionnaire within 10 min. They had easy access to the first researcher who was always online during the data collection period in case they faced any ambiguity. All the teachers were informed of the research purposes and voluntarily participated in this research, and their information was kept anonymous and confidential throughout the process of data collection and analysis. The outliers and incomplete responses were deleted from the final sample of the study.

A selective sample of 26 participants who expressed willingness to provide further detailed information was selected for the semi-structured interviews. According to Miles et al. (2014), interviews could provide additional information about the participants which could give the researchers a deeper analysis of the issue at hand. Due to the pandemic, face-to-face semi-structured interviews were not possible, so online semi-structured interviews were conducted via online platforms, such as Google Meet and Skype. Before interviewing, ethical considerations were satisfied and then the first and second researchers invited the participants through an invitation link to Google Meet and Skype. The average time spent for each semi-structured interview was 20 min during which the first author clarified the questions for the participants and asked for further explanations when needed. All the semi-structured interviews were recorded after taking consent from the interviewees to be transcribed for qualitative analysis.

# Data analysis

The quantitative data obtained from the questionnaire were analyzed using SPSS software version 22.0 and AMOS version 24.0. First, to check the factor structure of the questionnaire, CFA was used. In order to investigate factors that build resilience among state and non-profit schools' teachers, one-sample Wilcoxon signed-rank test was run for the five factors of CD-RISC: "(1) personal competence, high standards and tenacity; (2) trust in one's instincts, tolerance of negative affect and strengthening effects of stress; (3) positive acceptance of change and secure relationships; (4) control; and (5) spiritual influences" (Liu & Chu, 2022, p. 2). In addition, a Mann–Whitney U test was run in SPSS software to compare the mean differences between the two groups of state and non-profit school TR, as indicated by the five factors of CD-RISC. These nonparametric tests were run because the results of Shapiro–Wilk test of normality showed that the data were not normally distributed for the two sets of scores (p < 0.05).

The gualitative data obtained from the semi-structured interviews were thematically analyzed by inductively coding the data through MAXQDA software (version 2020). Sentence was considered the analysis unit, and only manifest content, not latent content, was examined. The inductive approach to content analysis was utilized since there was no pre-established framework for coding the data; thus, all the codes, categories, and themes emerged directly from the data collected in this study (Berg, 2001). Five consecutive steps recommended by Gao and Zhang (2020) were taken to do the qualitative analysis. More particularly, the first step related to cleaning the data where the researchers checked the data for any inconsistency, ambiguity, irrelevant responses, or language errors, and they cleaned the identified problems accordingly. The second step was coding the data, where the researchers engaged at open coding the data. At this stage, 282 and 310 open codes were generated respectively for state school teachers' and non-profit language institute teachers' groups. Next, in the generating themes stage, or what was called axial coding, the open codes were grouped under pertinent subthemes. Accordingly, 51 subthemes were separately identified for each of the state school teachers' and non-profit language institute teachers' groups. In the fourth stage of categorizing themes, the relevant subthemes were merged into more general themes. In this respect, the 51 subthemes for each category were categorized under three general themes of (1)school-focused factors, (2) student-focused factors, and (3) teacher-focused factors. In the final step of report writing, a comprehensive and detailed report of the analytic stages was produced which involved producing visual illustrations of the analysis in the form of figures, reporting of frequencies, and bringing relevant excerpts from the datasets to support the generated codes, themes, and their frequencies. Moreover, to keep the identity of the participants confidential, whenever referring to any participant, numbers were used instead of their real names in the results section (e.g., P7 means Participant 7).

Following Nassaji (2020), a second coder was recruited to independently check a fifth of the entire set of emerged codes and themes, which proved an inter-coder coefficient of 91%, indicating a high agreement rate.

#### Results

#### **Descriptive statistics**

The descriptive statistics were first calculated for the 23 items of the CD-RISC. Table 3 shows that, regarding the first factor (personal competence, high standards, and tenacity), the observed mean score for state schools TR (M=3.87, SD=0.60) was more than that of the non-profit institutes TR (M=3.35, SD=0.66). However, concerning the second factor (tolerance of negative affect and strengthening effects of stress), the observed mean score of TR in the non-profit context (M=3.60, SD=0.76) was slightly more than

Factor	Context	N	Min	Max	Mean	SD
1	State	105	2.13	5.00	3.87	0.60
	Non-profit	100	1.50	4.38	3.35	0.66
2	State	105	1.67	5.00	3.48	0.68
	Non-profit	100	1.50	5.00	3.60	0.76
3	State	105	2.00	5.00	3.85	0.57
	Non-profit	100	1.75	5.00	3.85	0.66
4	State	105	1.33	5.00	3.78	0.76
	Non-profit	100	2.00	5.00	3.76	0.76
5	State	105	1.00	5.00	4.00	0.97
	Non-profit	100	1.00	5.00	3.83	1.03

Table 3 Descriptive statistics of the five factors in the CD-RISC

1 = personal competence, high standards, and tenacity; 2 = tolerance of negative affect and strengthening effects of stress;

3 = positive acceptance of change; 4 = control; 5 = spiritual influences; SD = standard deviation

 Table 4
 Results of one-sample Wilcoxon signed-rank test for the five factors of the CD-RISC (state schools)

Factor	N	НМ	ОМ	Т	SE	z	р
1	105	3	3.88	5,208.50	303.65	8.33	0.000
2	105	3	3.50	4,015.00	277.11	5.91	0.000
3	105	3	4.00	5,006.50	293.86	8.27	0.000
4	105	3	4.00	4,135.00	263.85	7.21	0.000
5	105	3	4.00	4,123.50	266.99	6.90	0.000

1 = personal competence, high standards, and tenacity; 2 = tolerance of negative affect and strengthening effects of stress; 3 = positive acceptance of change; 4 = control; 5 = spiritual influences; HM = hypothetical median; OM = observed median; SE = standard error

the state context (M=3.48, SD=0.68). With regard to the factor of positive acceptance of change, the observed mean scores of TR in the state (M=3.85, SD=0.57) and non-profit (M=3.85, SD=0.6) contexts were the same. As for the factor of control, the difference between the mean scores of the state school TR (M=3.78, SD=0.76) and that of non-profit institutes' teachers (M=3.76, SD=0.76) was marginal. Regarding the fifth factor (spiritual influences), the TR observed in the state (M=4.00, SD=0.97) and non-profit contexts (M=3.83, SD=1.03) was slightly different.

# Factors that develop bilingual EFL TR in state schools

With regard to the first research question, pertaining to the significant factors that develop bilingual EFL TR in state schools, quantitative and qualitative data were obtained and analyzed. The results of the modified questionnaire with 23 items and five factors were inspected through a one-sample Wilcoxon signed-rank test as the data were ordinal and the assumption of normality was not met for the mean scores of the scale's five components, as checked through Shapiro–Wilk test of normality.

The participants' mean scores in the five factors were compared to the median of 3 as the responses ranged from 1 to 5 in the CD-RISC. As can be seen in Table 4, the results showed that TR in the state schools was significantly built by the factor of personal competence, high standards, and tenacity as the observed median of factor 1 was significantly higher than the hypothetical median (T=5208.50, z=8.33, p=0.000). Moreover, TR was significantly established by the factor of tolerance of negative affect and strengthening effects of stress (T=4015.00, z=5.91, p=0.000). Similarly, the observed medians of positive acceptance of change (T=5006.50, z=8.27, p=0.000), control (T=4135.00, z=7.21, p=0.000), and spiritual influences (T=4123.50, z=6.90, p=0.000) were significantly higher than the hypothetical median, indicating that TR in the state schools is built by these factors according to the results obtained from the CD-RISC.

To have a deeper understanding of the factors that build Iranian bilingual EFL TR, individual semi-structured interviews were also conducted. Content and thematic analyses of the qualitative data run through MAXQDA revealed a cluster of factors that the Iranian state school teachers perceived to be influential in their resilience. Due to space limitation, only subthemes with the highest frequency are presented in figures. The definitions of the main themes as well as an example for one sub-theme are provided.

#### Student-focused

The students can assist their bilingual EFL teachers by establishing a positive attitude in the state school's classroom which develops resilience in teachers (Wang, 2021).

Example: Motivation.

P5: "My students' eagerness to learn aid me to cope with challenges".

## Teacher-focused

It refers to the individual traits of bilingual EFL teacher that are manifested during traumatic conditions to cope with difficulties in state school (Doney, 2013).

Example: Talking and consulting with others.

P2: "I always try to talk to the manager to get the sources and reasons of the challenges that I face with in the workplace".

# School-focused

Dominant factors associated with the context rather than the personal factors that promote resilience (Ainsworth & Oldfield, 2019) of bilingual EFL teachers in state schools.

Example: Providing facilities and technological equipment.

P6: "Schools can promote our resilience by providing an equipped environment (e.g., modern technology, smart boards, and video projection) for the teachers".

As portrayed in Fig. 1, among the three main themes of student-focused, teacher-focused, and school-focused factors generated for the state school teachers' group, the teacher-focused factors (F=188) had the highest number of subthemes and codes. Within this theme, 28 subthemes were identified, among which the subthemes of talking and consulting with others (F=23), adaptability (F=19), control on self and word (F=17), diverting attention from unpleasant sources (F=14), coping skills (F=10), keeping calm (F=10), and delaying reaction (F=8) had the highest frequency of being mentioned by the state school teachers. Some *teacher-focused* excerpts from the state school teachers and the subtheme to which each of the excerpts belongs are appended in "Appendix 3".

As displayed in Fig. 1, the second most frequent theme was school-focused factors (F = 71). Fifteen subthemes were identified for this theme, among which the subthemes

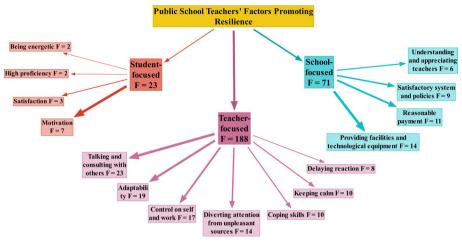


Fig. 1 Factors promoting state school teachers' resilience

of providing facilities and technological equipment (F=14), reasonable payment (F=11), satisfactory system and policies (F=9), understanding and appreciating teachers (F=6), and pleasant working atmosphere (F=5) had the highest frequency of being mentioned by the state school teachers. Some *school-focused* excerpts from the state school teachers and the subtheme to which each of the excerpts belongs are presented in "Appendix 3".

As illustrated in Fig. 1, the third theme in order of frequency was student-focused factors (F=23). Thirteen subthemes were identified for this theme, among which the subthemes of student motivation (F=7), satisfaction (F=3), being energetic (F=2), and high proficiency (F=2) had the highest frequency of being mentioned by the state school teachers. *Student-focused* excerpts from the state school teachers and the subtheme to which each of the excerpts belongs are presented in "Appendix 3".

The findings of qualitative data confirmed some factors of TR, as found by the CD-RISC. For example, the results obtained from the questionnaire showed that factors like tolerance of stress, acceptance of change, and control were statistically significant in building TR. Similarly, the findings of the interview verified that teacher-related factors like keeping calm, adaptability, and control on self and work could build TR.

# Factors that develop bilingual EFL TR in non-profit schools

With regard to the second research question, the same analyses were conducted to find the factors that build TR in the non-profit schools. The results of one-sample Wilcoxon signed-rank test for the modified 23-item CD-RISC (see Table 5) indicated that TR in the non-profit institutes was significantly built by the factor of personal competence, high standards, and tenacity (T=3566.50, z=4.78, p < 0.001) as well as the factors of tolerance of negative affect and strengthening effects of stress (T=4031.00, z=6.23, p < 0.001), positive acceptance of change (T=4450.50, z=7.77, p < 0.001), control (T=3800.00, z=7.08, p < 0.001), and spiritual influences (T=3214.00, z=6.13, p < 0.001) as the observed medians were significantly higher than the hypothetical median, suggesting that TR in non-profit schools, as the findings obtained from the CD-RISC revealed, is shaped by these factors.

	-						
Factor	N	НМ	ОМ	Т	SE	z	р
1	100	3	3.50	3566.50	269.00	4.78	0.000
2	100	3	3.67	4031.00	273.18	6.23	0.000
3	100	3	3.75	4450.50	272.89	7.77	0.000
4	100	3	3.83	3800.00	247.37	7.08	0.000
5	100	3	4.00	3214.00	226.12	6.13	0.000
2	100	5	1.00	5211.00	220.12	0.15	

**Table 5** Results of one-sample Wilcoxon signed-rank test for the five factors of the CD-RISC (non-profit schools)

1 = personal competence, high standards, and tenacity; 2 = tolerance of negative affect and strengthening effects of stress; 3 = positive acceptance of change; 4 = control; 5 = spiritual influences; HM = hypothetical median; OM = observed median; SE = standard error

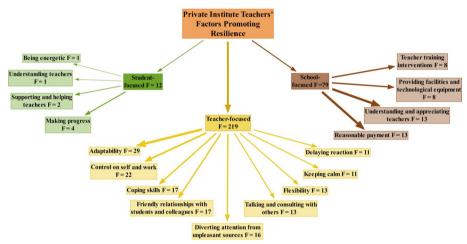


Fig. 2 Factors promoting non-profit school teachers' resilience

Content and thematic analyses of the qualitative data further revealed an array of factors perceived to be influential by the Iranian non-profit school teachers in building their TR. The most frequent subthemes are illustrated in Fig. 2.

# Student-focused

Students can help their bilingual EFL teachers in non-profit institutes by demonstrating good behaviors and cooperation which foster TR (Wang, 2021).

Example: Making progress.

P23: "Students' progress and grow in English language motivates me and assist to be resilient".

# Teacher-focused

Personal characteristics of bilingual EFL teacher in the face of adversity (Doney, 2013) that develop resilience in non-profit institutes.

Example: Adaptability.

P13: "I can easily adapt myself to the different situations".

# School-focused

Contextual factors that maintain resilience (Johnson et al., 2014) of bilingual EFL teachers in non-profit institutes.

Example: Understanding and appreciating teachers.

P15: "Supervisors should give teachers this sense that they are being appreciated; it promotes resilience when their efforts are seen by the managers and authorities".

As portrayed in Fig. 2, among the three main themes of student-focused, teacherfocused, and school-focused factors generated for the non-profit language school teachers' group, the teacher-focused factors (F=219) had the highest number of subthemes and codes. Within the *teacher-focused factors* theme, 27 subthemes were identified, among which the subthemes of adaptability (F=29), control on self and work (F=22), friendly relationships with students and colleagues (F=17), coping skills (F=17), diverting attention from unpleasant sources (F=16), talking and consulting with others (F 13), flexibility (F=13), delaying reaction (F=11), and keeping calm (F=11) had the highest frequency of being mentioned by the non-profit language institute teachers. Some of the *teacher-focused* excerpts from the teachers in the non-profit schools and the subtheme to which each of the excerpts belongs are presented in "Appendix 4".

The second most frequent theme was school-focused factors (F=79) (see Fig. 2). Sixteen subthemes were identified for this theme, among which the subthemes of understanding and appreciating teachers (F=13), reasonable payment (F=13), teacher training interventions (F=8), providing facilities and technological equipment (F=8), helping teachers keep calm and be resilient (F=7), and pleasant working atmosphere (F=6) had the highest frequency of being mentioned by the non-profit school teachers. Some *school-focused* excerpts from the non-profit school teachers and the subtheme to which each of the excerpts belongs are appended in "Appendix 4".

As illustrated in Fig. 2, the third theme in order of frequency was student-focused factors (F = 12). Eight subthemes were identified for this theme, including such subthemes as making progress (F = 4), supporting and helping teachers (F = 2), being energetic (F = 1), and understanding teachers (F = 1), being mentioned by the non-profit language institute teachers. Some *student-focused* excerpts from the non-profit school teachers and the subtheme to which each of the excerpts belongs are presented in "Appendix 4".

The qualitative data from the interviews supported the quantitative data obtained from the CD-RISC. For instance, the quantitative results indicated that factors like tolerance of stress, acceptance of change, and control were crucial in building TR. The qualitative findings also verified that teacher-related factors like flexibility, adaptability, coping skills, keeping calm, and control on self and work were significant factors of TR.

# Differences between the factors that develop bilingual EFL TR in state and non-profit schools

With regard to the last research question, a Mann–Whitney U test was used to compare the five factors of TR in the CD-RISC between the two groups of state and non-profit school teachers. Table 6 shows that there were not any significant differences between the two groups of teachers for the TR factor of personal competence, high standards, and tenacity (U=5183.00, z=-0.159, p>0.05). Similarly, the differences between

Factor	Context	N	MR	U	z	р
1	State	105	102.36	5183.00	- 0.159	0.874
	Non-profit	100	103.67			
2	State	105	100.77	5015.50	- 0.553	0.580
	Non-profit	100	105.35			
3	State	105	98.10	4736.00	- 1.21	0.225
	Non-profit	100	108.14			
4	State	105	104.17	5127.00	- 0.292	0.770
	Non-profit	100	101.77			
5	State	105	108.01	4724.00	- 1.26	0.207
	Non-profit	100	97.74			

Table 6 Results of Mann–Whitney U test for the five factors of the CD-RISC

1 = personal competence, high standards, and tenacity; 2 = tolerance of negative affect and strengthening effects of stress; 3 = positive acceptance of change; 4 = control; 5 = spiritual influences; MR = mean rank

state and non-profit school TR were not significant for the TR factors of tolerance of negative affect and strengthening effects of stress (U=5015.50, z=-0.553, p>0.05), positive acceptance of change (U=4736.00, z=-1.21, p>0.05), control (U=5127.00, z=-0.292, p>0.05), and spiritual influences (U=4724.00, z=-1.26, p>0.05).

The findings of semi-structured interviews, however, revealed some differences in the factors that build TR among state and non-profit school teachers. For example, non-profit school teachers believed that teacher training courses, teacher-student rapport, and students' progress could enhance their TR, while these factors were not expressed by state school teachers.

# Discussion

The major aims of the present study were to investigate the factors augmenting resilience of EFL teachers in non-profit institutes and state schools and identifying the differences between these two groups. To reach this purpose, a 23-item questionnaire and semi-structured interviews were used. The findings of the questionnaire revealed that there were no meaningful differences between the factors that build bilingual EFL TR in non-profit institutes and state schools. On the other hand, the outcomes of the interviews indicated that non-profit institutes' and state schools' teachers had different repertoires to reach resilience.

The first research question addressed the significant factors that develop bilingual EFL TR in state schools. The results obtained from the quantitative phase of the study support Oldfield (2019), Daniilidou and Plastidou (2018), Kangas-Dick and O'Shaughnessy (2020) in which both individual and contextual traits were reported as prominent in building TR. The present study contributes to the existing literature on the resilience of EFL teachers in state schools. The study has highlighted the personal factors which are utilized by bilingual EFL resilient teachers.

Nonetheless, the findings of the qualitative part are in line with Malcom (2007) who reported that adaptability, positive perspective, and keeping calm can foster TR. The study also suggests that state schools' resilient teachers have collaboration with other stakeholders in their setting (Kangas-Dick & O'Shaughnessy, 2020; Le Cornu, 2013; Mansfield et al., 2016; Shields & Mullen, 2020). Further, the results of the current study

are consistent with Richards et al. (2016) in that sharing feelings with others and great enjoyment of educating are connected with TR. Following that, stressors and exhaustion in the workplace can be one of the possible reasons for teachers' relationship with colleagues. Therefore, it can be asserted that mutual interaction with their peers and enjoyment in teaching practice can promote TR in state schools. They also demonstrate resilience in supportive and pleasant settings (Boyd et al., 2011; Shields &Mullen, 2020). It is well-evident that another source of social support for state schools' teachers is from administrators (Boyd et al., 2011; Ndoye et al., 2010; Shields & Mullen, 2020; Whipp & Salin, 2018). One potential reason that may account for the obtained results is the top-down policies in state schools (Atai & Mazlum, 2013) which require support from administrators and resilient students. The existing study discloses that both personal and contextual factors are critical in fostering EFL teachers' resilience in state schools.

The second research question addressed the factors developing bilingual EFL TR in non-profit institutes. Results of the quantitative phase are in line with Morettini et al. (2020) who indicated that personal characteristics are important in fostering EFL TR in non-profit institutes. The findings also suggest that contextual factors can build resilience as well (Kangas-Dick & O'Shaughnessy, 2020) among non-profit institute teachers. Furthermore, the outcomes of the qualitative part of the study highlighted individual variables, such as promoting positivity, coping capacities; emotional facets, including flexibility, adaptability, keeping calm, and adoring the job (Mansfield et al., 2012a, 2012b) are prominent in non-profit institutes' TR. The findings also support Fathi and Saeeidian (2020) that self-efficacy can enhance TR and decrease their burnout. The principal reason behind self-efficacy is the teachers' control on both themselves and their work. Besides, the teachers' ability to recognize, control, use and express their emotions can be the source of emotional intelligence. Then it can be claimed that self-efficacy and emotional intelligence are of great importance in promoting EFL TR in non-profit institutes. In addition, resilient EFL teachers in non-profit institutes are able to aid the students' development and promotion in learning, which is consistent with Day and Gu (2014) and Mansfield et al. (2018). Therefore, the findings depicted that the students' progress results in TR which is in line with the results of Bennett et al. (2013), Day and Gu (2014), and Perrachione et al. (2008). Subsequently, the current research supports Tait (2008), and Shields and Mullen (2020) that teacher training programs foster TR. Simply put, teacher's awareness of how to overcome difficulties in challenging situations can be the reason for this finding. Thus, it can be stated that mentoring programs would be influential in TR.

The third research question addressed the differences between the factors that develop bilingual EFL TR in state schools and non-profit institutes. There were not prominent differences among the factors that build resilience in state schools and non-profit institutes' teachers. Based on the results from the questionnaire, all the teachers in these two sectors were equally resilient. However, regarding the qualitative part, there were some differences. For instance, with regard to the school-focused factors, non-profit school teachers mentioned teacher training courses as a building factor for TR, whereas state school teachers perceived satisfactory curriculum and policies as a key aspect to their resilience. This could be justified with reference to the strict rules needed to be followed in state schools as the top-down policies about teaching methodology, materials, and testing procedures in Iran could influence TR (Atai & Mazlum, 2013). Similarly, regarding teacher-focused factors, the state school teachers resort to consulting with others more than non-profit school teachers as the former context follows national regulations that necessitates more collaboration among teachers. By contrast, in non-profit schools where teachers have more freedom and could use their creativity more than state school teachers, the factor of adaptability is more evident with a frequency of 29 compared to 19 in state school teachers. Another change between these two contexts is the importance of the students' progress for the non-profit school teachers, whereas this is missing in the context of state schools. Overall, the observed differences displayed that "the interaction between teachers and the environments in which they live and work also shapes and cultivates their capacity for resilience" (Liu & Chu, 2022, p. 9), and the contexts in which the teachers operate could play a role in building TR (Gu, 2018; Li et al., 2019; Mansfield et al., 2018).

# Conclusion

This study examined the significant factors that develop bilingual EFL TR in non-profit institutes and state schools in the Iranian context. The results demonstrated that all the five factors of TR examined by the CD-RISC were evident among all the participants in both settings, whereas semi-structured interviews revealed that the array of factors promoting TR in state and non-profit contexts were mostly the same, but there were some differences which are rooted in the regulations and requirements of these contexts. Whereas the state schools follow nationwide and fixed policies, curricula, and materials which reduce teacher creativity and increase stress, the non-profit schools emphasize learners' progress and give more freedom to teachers and help them by holding teacher training courses which make them more resilient.

This study offers some implications for investigating and building bilingual EFL TR. First, it confirms a five-factor structure of bilingual EFL TR with minor modifications in the Iranian EFL context and provides a valid measure to probe EFL TR for further studies. Second, the state EFL context in Iran should follow a bottom-up approach rather than a top-down one that ignores the views of the teachers and follows "a highly centralized policymaking process" (Atai & Mazlum, 2013, p. 389). The educational policy makers need to consider TR as a significant variable in improving the quality of EFL education as the teaching process would be negatively influenced if the teachers are not resilient enough. The findings revealed that school-related factors like teacher training courses, technological equipment, and payment are crucial factors for building TR; therefore, the policy makers need to address them to make more resilient EFL teachers. The EFL curriculum needs to consider the gap between planning and practice to make the teachers more resilient. Third, collaborations among teachers ought to be enhanced as a building factor of TR in both contexts was consulting with colleagues. Teachers can create EFL training networks to share their experiences of successful language educating and classroom running. This is particularly important for state schools where teacher training courses are not held, while the non-profit school teachers usually attend these classes as a requirement that could play a role in their resilience. Fourth, teachers should examine their students' learning needs and styles and focus on teacher-student rapport, particularly in the state schools where there

is more power distance between the teachers and students. Fifth, the educational administrators ought to offer satisfactory payment plans, provide appropriate technological facilities, and create a more relaxing atmosphere for the teachers to promote TR. Finally, teachers should improve their own emotion regulation abilities to stay calm and divert attention from unpleasant sources in stressful conditions.

Despite the implications of this study, a number of limitations could have jeopardized the generalizability of the findings. First of all, the data were only obtained from the school context, so EFL TR could be further probed in other settings, such as universities. Moreover, the results were obtained from a specific cultural setting using the bilingual Azeri-Persian EFL learners; therefore, further investigations are needed in other settings to expand the generalizability of the findings. Additionally, researchers can investigate the profiles of state and non-profit schools' EFL TR and examine their association with other psychological factors, like inspiration, well-being, professional identity, and burnout. Recently, the ecological prospect on language teacher psychology, for instance, has enticed increasing amount of consideration (Chu et al., 2021). Finally, the number of the participants was limited in both the quantitative and qualitative phases of this study, so future investigations could recruit larger samples to obtain more dependable findings.

# **Appendix 1: Semi-structured interview prompts**

- 1. Describe any factors that keep you motivated in challenging conditions of your teaching?
- 2. Is there anything that you think your school could have done at the time to promote your resilience? If yes, how?
- 3. How can you quickly adapt to new situations at school?
- 4. How can you keep your flexibility when situations change at school?
- 5. How do you manage yourself to stay calm when you feel upset, angry, and stressed at school?
- 6. To what extent do you think you have control on your work? What factors have limited your creativity and innovation?

# **Appendix 2: Semi-structured interview first draft**

- 1. What is resilience?
- 2. How do you control your work? How do you cope with tough situations?
- 3. What do you think your school can do for your job promotion?

# Appendix 3: Excerpts about factors that build state school TR

Factors	Excerpts	Sub-themes
Teacher-focused	P2:"I always try to talk to the manager to get these sources and reasons"	Consulting with others
	P6: "I attempt to adapt myself to the educa- tional setting (place, building) of the school"	Adaptability
	P5: "I try to have control on my manner"	Control on self and work
	P8: "I try to put it behind the door and cope with my anger"	Coping skills
	P1:"I try to keep myself calm to reach my goal"	Keeping calm
	P2: "I wait until the new changes go on their way"	Delaying reaction
	P1:"I try to keep away from problematic situ- ation"	Diverting attention from unpleasant
School-focused	P6: "Schools can promote our resilience by provide an equipped environment (modern technology, smart boards, and video projec- tion) for the teachers"	Providing facilities and technological equip- ment
	P11: "The authorities of schools can help by giving good salary to teachers"	Reasonable payment
	P7: "School managers should try to praise teachers"	Understanding and appreciating teachers
Student-focused	P5: "My students' eagerness to learn"	Motivation
	P7: "It is important that students are satisfied with my teaching"	Satisfaction
	P6: "Students' level of understanding matters"	Understanding

# Appendix 4: Excerpts about factors that build non-profit school TR

Factors	Excerpts	Sub-theme
Teacher-focused	P16: "I try to keep myself calm and not get angry in most of the situations"	Keeping calm
	P18: "It may be a useful way to have warm and friendly relationships in class"	Friendly relationships with students and col- leagues
	P13:"I can easily adapt myself to the different situations"	Adaptability
	P18: "I do my best to prevent the stressful atmosphere in my classes"	Coping skills
	P12: "When an unexpected situation happens in the school, I try not to involve myself in it"	Diverting attention from unpleasant sources
	P20:"Talking with other colleagues about the new methods, new approaches, or new materi- als is helpful"	Talking and consulting with others
	P12: "When situations change, I give some time to myself to think about the situations"	Delaying reaction
	P12: "I have quite a good control over my job"	Control on self and work

Factors	Excerpts	Sub-theme	
School-focused	P15: "Supervisors should give teachers this sense that they are being appreciated; it promotes resilience when their efforts are seen by the managers and authorities"	Understanding and appreciating teachers	
	P14:"I think institutes can have annual classes. They have to keep teachers updated of new methods and new approaches"	Teacher training interventions	
	P17: "By increasing the payment"	Reasonable payment	
	P13: "Providing the materials that we need in an institution"	Providing facilities and technological equip- ment	
Student-focused	P23: "Students' progress and grow in English language motivates me"	Making progress	
	P25: "I know that I can rely on my students and they can help"	Supporting and helping teachers	
	P25:"My students can understand my feelings and give this chance to me to relieve my feel- ings"	Understanding teachers	

#### Abbreviations

TR	Teacher resilience
L2	First language
EFL	English as a foreign language
TRS	Teacher resilience scale
FLTE	Foreign language teaching enjoyment
CD-RISC	Connor–Davidson resilience scale
BA	Bachelor of arts
MA	Master of arts
PhD	Doctor of Philosophy
CEFR	Common European Framework of Reference
CFA	Confirmatory factor analysis

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#### Author contributions

KR conceived the research idea, designed the study, collected/prepared the data for analysis, and wrote the first draft. MJE conducted the data analysis, interpreted the results and wrote the final draft of the paper. EP commented on the first draft and edited the final manuscript. MJE selected the appropriate journal, formatted the manuscript, and did the corresponding with the journal. All authors read and approved the final manuscript.

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### Availability of data and materials

The datasets generated and analyzed during the current study are available from the corresponding author on reasonable request.

#### Declarations

#### Ethical approval and consent to participate

All procedures performed in the study were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki declaration and its later amendments or comparable ethical standards. Informed consent was obtained from all the individual participants included in this study.

#### **Consent for publication**

The participants were informed that the study would be published in a journal and the findings would be shared with them.

#### **Competing interests**

The authors declare no competing interests.

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